

ABSTRACT

The present invention provides a capillary electrophoresis chip apparatus for detecting nucleotide polymorphism or single nucleotide polymorphism belonging to capillary electrophoresis apparatuses. The apparatus comprises an upper channel layer comprising a one-, two-, or multi-dimensional microfluid channel and an electrode aperture structure for loading sample, a middle electrode layer for sealing the microfluid channel to form an intact capillary and providing the needed voltage for electrophoresis; and a lower heating layer for providing a stable temperature gradient for electrophoresis. The upper, middle and lower layers are thermal conductive and adhesive to each other.